

Alaska

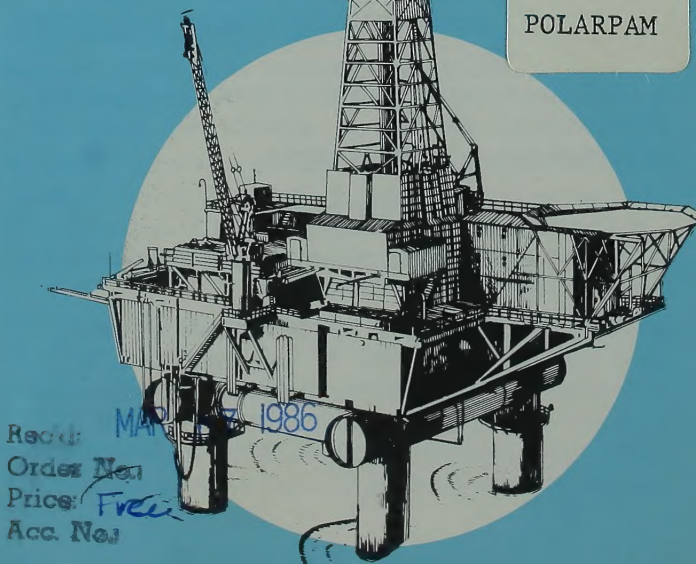
Oil and Gas Industry

Facts



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GENERAL

■ The largest oil field yet discovered in the U.S. is the Prudhoe Bay field on Alaska's North Slope. The second largest field in terms of daily production and remaining reserves is the Kuparuk River field, also on the North Slope.

■ Prudhoe Bay has 9.6 billion barrels of recoverable crude oil and Kuparuk has 1.5 billion barrels of recoverable crude oil. By comparison, a "giant" field in the lower 48 has 100 million barrels of recoverable oil.

■ Alaska ranks second, behind Texas, in crude oil production and eighth in natural gas production among 31 petroleum producing states.

■ Alaska ranks second in proven crude oil reserves and third in proven gas reserves.

■ Alaska has many sedimentary basins which have oil and gas potential. Only the Cook Inlet and North Slope basins have current production.

■ On the average, the State of Alaska receives more income from the petroleum industry every day than the United States paid for Alaska a century ago.

■ Total state oil production is about 1.7 million barrels of oil per day, with the North Slope production alone accounting for almost 20 percent of the total United States production.

■ Natural gas from the Cook Inlet Basin provides the fuel to heat and light Anchorage and Southcentral Alaska.

■ The only liquified natural gas plant of its type in North America is located in Kenai.

■ The largest fertilizer plant on the West Coast is located in Kenai and uses natural gas to make urea fertilizer.

■ Alaska's first exploratory well was drilled on the Iniskin Peninsula, Cook Inlet, in 1900, by the Alaska Petroleum Company.

■ The first commercial oil discovery was made in 1902 near Katalla on the shore of the Gulf of Alaska. This field was produced until 1933.

DRILLING

■ Alaska drilling activity accounts for about one percent of the drilling activity in the U.S. From 1900 through 1984, 2,360 wells have been drilled in Alaska, including 123 wells drilled by the Federal Government in the National Petroleum Reserve - Alaska on the North Slope.

■ On the average, only 1 well in 10 finds any oil or gas and only one in 50 finds enough for commercial production.

■ There has been only one well drilled for every 315 square miles in the state through the start of 1984. This compares with one well for every square mile in the Lower 48.

■ The deepest well drilled in the state was the Husky Tunalik Test Well #1, in the National Petroleum Reserve - Alaska. The well was drilled to 20,335 feet, then plugged after finding no oil.

■ The Alaska Oil and Gas Conservation Commission estimates that Alaska had about 8 billion barrels of known oil reserves at the beginning of 1985, of which 5.8 billion were at Prudhoe Bay. Similar estimates for natural gas were 34.1 trillion cubic feet of known reserves, of which 28.5 were at Prudhoe Bay.

■ The average exploratory well in Alaska can cost from \$10 to \$30 million, about five times the cost of drilling a well in the Lower 48.

PRODUCTION

■ Alaska's eight producing oil fields have 864 producing wells. Six of the fields are located in the Cook Inlet-Kenai Peninsula area and two are on the North Slope.

■ Alaska's 12 producing gas fields have 81 producing wells. Ten of the fields are located in the Cook Inlet - Kenai Peninsula area and two are located on the North Slope near Barrow.

■ At the close of 1984, the average Prudhoe Bay well produced 3,200 barrels of oil per day. The average of all other Alaska wells was 630 barrels per well per day.

PRODUCTION...

■ During 1984, Alaska produced 630,440,293 barrels of oil, 1,035 million cubic feet of casinghead gas (gas dissolved in oil) and 200 million cubic feet of dry gas.

■ Since 1902, Alaska has produced nearly 5 billion barrels of oil through December, 1984. Of this amount, Prudhoe Bay wells had produced 3.8 billion or 76 percent of this total.

■ Alaska's deepest oil producing well is 15,200 feet and is located in the Beaver Creek field on the Kenai Peninsula.

■ The McArthur River Field, in the Cook Inlet, produces 52 percent of the oil produced in Southern Alaska.

■ Eleven companies are operators of current oil or gas production wells in Alaska. Many others own an interest in production.

OFFSHORE

■ Alaska's offshore area, to a water depth of 200 meters, is approximately 582,900 square miles. This area represents more than two-thirds of the total U.S. continental shelf to that depth.

■ The State of Alaska has estimated there are 394,881 square miles of land off its coast on the continental shelf which has the potential of containing economic deposits of oil and gas.

■ Over 500 wells have been drilled in state and federal waters off of Alaska.

■ Since 1968, the petroleum industry has conducted technical and biological research in the Gulf of Alaska and the Beaufort and Bering Seas at a cost of over \$200 million.

■ Several types of drilling structures are used in Alaska offshore areas including: drill ships; concrete and gravel islands; and semi-submersible and jack-up drilling rigs.

■ There are 14 production platforms in the upper Cook Inlet, one produces only natural gas, the remainder produce crude oil.

OFFSHORE...

■ Installation of the Cook Inlet platforms challenged industry's ability to cope with unique environmental conditions. The platforms have successfully withstood 33-foot spring tides, ice floes up to six feet thick, and silt-laden currents running up to 8 knots for 20 years.

■ Alaska's upper Cook Inlet—opened to oil and gas development in the 1960's following a state lease sale—is now one of only three offshore producing provinces in the United States. The other two provinces are offshore California and the Gulf of Mexico.

■ Construction has begun on facilities to develop the Endicott field in the Beaufort Sea. When production begins, this will be the fourth offshore producing area in the U.S.

■ According to a recent public opinion survey, 75% of all Alaskans surveyed favor offshore oil and gas development in Alaska's waters.

REFINING—MANUFACTURING

■ Alaska has three refineries in operation.

■ Two of the refineries are located on the Kenai Peninsula and the third is located at North Pole, near Fairbanks.

■ The three refineries have the capacity to process in excess of 135,000 barrels of crude oil daily.

■ Refined products from these plants include gasoline, diesel fuel, heating fuels, jet fuel, heavy fuel oil and asphalt.

■ There are five topping plants (mini-refineries) in Alaska, two on the North Slope and three along the Trans-Alaska Pipeline route. Over 48,500 barrels of oil are processed daily to produce diesel fuel.

■ The crude oil refined at Kenai comes from both offshore and onshore oil fields in the Kenai-Cook Inlet area. Additionally, over 50,000 barrels of North Slope crude oil is processed daily in Kenai by the two refineries. The topping plants and the North Pole refinery use crude oil from the North Slope oil fields.

REFINING—MANUFACTURING...

■ Alaska has one fertilizer plant. This plant, located in Kenai, uses natural gas as a feed stock to manufacture 3,000 tons per day of ammonia pellets and 2,700 tons per day of urea fertilizer. The plant is the largest fertilizer complex on the West Coast. Most finished products are shipped to the western United States.

■ Alaska has one plant in Kenai which liquifies natural gas for shipment to Japan. It is the largest plant of its type in North America, processing 150 million cubic feet of natural gas per day.

TRANSPORTATION

■ The first petroleum shipment to Alaska arrived at Nome in 1888 with a cargo of kerosene and miner's candles. Tankers and barges have been plying Alaska waters since 1904 bringing gasoline, aviation fuel and heating oils to consumers at more than 100 ports throughout the state.

■ Typical vessels loading crude oil at Valdez today have capacities of 840,000 barrels. By comparison, tankers of 1904 could carry only 6,500 barrels.

■ Two tankers load every 24 hours at Valdez to transport North Slope oil to refineries in the Lower 48.

■ The Trans-Alaska Pipeline is 798 miles long and runs from Prudhoe Bay to Valdez. Total pipeline mileage in Alaska is 1,432 miles.

■ The opening of the 370-mile North Slope haul road provided the only road access to the North Slope.

■ Transporting gasoline from North Kenai to Anchorage by commercial truck costs six times more than by pipeline.

■ There has not been a single incident causing lasting environmental damage in almost 100 years of petroleum transportation in Alaska.

ECONOMICS

■ Oil and gas royalties and taxes provide about 90 percent of the State of Alaska's income.

■ About 30 percent of all Alaska households have at least one member who is employed directly or indirectly by the petroleum industry. Gross estimated income earned by these households for 1984 is \$1.7 billion and represents about 30% of household income earned statewide.

ECONOMICS...

■ Through 1984, oil companies have invested over \$23 billion in developing Prudhoe Bay, Kuparuk and the Trans-Alaska Pipeline. Billions more will be required to maintain and enhance future oil production. Additional billions will be required to bring new fields into production and to deliver North Slope natural gas to market.

■ Petroleum development costs in Alaska are about five times as expensive as other offshore areas of the United States.

■ Each additional barrel of oil produced in Alaska helps reduce the \$90 billion per year presently being paid for foreign oil imported to the United States.

■ Based on estimates of the U.S. Minerals Management Service, Alaska and its offshore areas may contain greater undiscovered oil and gas resources than the total of all petroleum yet found in the state, including Prudhoe Bay.

TAXATION

■ Alaska's petroleum industry paid the State of Alaska approximately \$3.48 billion in taxes, royalties and lease bonuses during FY 1984. This represented about 90 percent of the state's revenues, and about 94 percent of taxes paid to the state.

■ In FY 1985, the State of Alaska's estimated petroleum revenue will total \$3.4 billion, about 94 percent of taxes paid to the state in 1985.

■ Alaska received an estimated \$1.4 billion in oil and gas royalties, rents and bonuses in FY 1984. This includes more than \$365 million allotted to the state's Permanent Fund.

■ Alaska's production tax rate on most oil is 15 percent of value; the rate on natural gas is 10 percent.

■ Alaska's petroleum industry pays a special property tax imposed by the state. In FY 1984, the state received \$131 million in oil and gas property taxes.

■ In addition, local governments in Alaska collected more than \$242 million in property taxes from the oil and gas industry on state-assessed property in 1984.

■ Alaska's petroleum industry paid about \$265 million in income taxes to the state for FY 1984.

PRODUCTION...

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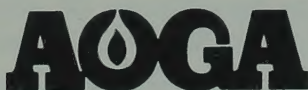
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ALASKANS AND THE PETROLEUM INDUSTRY

- Alaskans in all parts of the state benefit from the petroleum industry, directly or indirectly. In areas where the industry has direct operations, jobs are created, homes and industrial facilities are constructed which share the local tax burden, and employees become active participants in civic and charitable affairs.
- According to a recent survey, firms which derive a majority of their business from Alaska's petroleum industry hired over 85% of their employees from Alaska residents.
- The average length of Alaska residency for an employee in the petroleum and support industries is over 13 years.
- It is estimated that this year petroleum companies will contribute nearly \$4 million to civic, cultural, health, educational and community organizations in Alaska.
- Local economies receive benefits from petroleum activities. In the Kenai area, oil and gas facilities provide direct employment for hundreds of Kenai residents and a major portion of the borough's tax base.
- Every state project that is funded— schools, social programs, public buildings, highways, ferries, state employee salaries, fish and game programs, revenue sharing with local governments, etc.— receives an average of more than 84 percent of its funding directly because of the petroleum industry.
- On an overall basis, 85% of Alaskans feel that oil and gas development has been good for Alaska.
- The financial benefits from petroleum development make every citizen of Alaska a shareholder in the future of the oil and gas industry.



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